WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein an irradiation area of the continuous wave laser beam at the semiconductor film has an oval shape having an aspect ratio of 10 or more, and

wherein the continuous wave laser beam is a second harmonic of a solid laser.

2. A method of manufacturing a semiconductor device according to claim 1, wherein the semiconductor film is an amorphous semiconductor film.

3. A method of manufacturing a semiconductor device according to claim 1, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

4. A method of manufacturing a semiconductor device according to claim 1, wherein the second harmonic has a wavelength of about 532 nm.

5. A method of manufacturing a semiconductor device according to claim 1, wherein the aspect ratio is 100 to 10000.

6. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein the continuous wave laser beam is a second harmonic of a solid laser.

7. A method of manufacturing a semiconductor device according to claim 6, wherein the semiconductor film is an amorphous semiconductor film.

8. A method of manufacturing a semiconductor device according to claim 6, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

9. A method of manufacturing a semiconductor device according to claim 6, wherein the second harmonic has a wavelength of about 532 nm.

10. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a plastic substrate;

forming a semiconductor film on the insulating film; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein an irradiation area of the continuous wave laser beam at the semiconductor film has an oval shape having an aspect ratio of 10 or more, and

wherein the continuous wave laser beam is a second harmonic of a solid laser.

11. A method of manufacturing a semiconductor device according to claim 10, wherein the semiconductor film is an amorphous semiconductor film.

12. A method of manufacturing a semiconductor device according to claim 10, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

13. A method of manufacturing a semiconductor device according to claim 10, wherein the second harmonic has a wavelength of about 532 nm.

14. A method of manufacturing a semiconductor device according to claim 10, wherein the aspect ratio is 100 to 10000.

15. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the semiconductor film; and

irradiating the source region and the drain region with a linear laser beam of excimer laser,

wherein the continuous wave laser beam is a second harmonic of a solid laser.

16. A method of manufacturing a semiconductor device according to claim 15, wherein the semiconductor film is an amorphous semiconductor film.

17. A method of manufacturing a semiconductor device according to claim 15, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

18. A method of manufacturing a semiconductor device according to claim 15, wherein the second harmonic has a wavelength of about 532 nm.

19. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

patterning the crystallized semiconductor film to form a crystallized island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a second harmonic of a solid laser.

20. A method of manufacturing a semiconductor device according to claim 19, wherein the semiconductor film is an amorphous semiconductor film.

21. A method of manufacturing a semiconductor device according to claim 19, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

22. A method of manufacturing a semiconductor device according to claim 19, wherein the second harmonic has a wavelength of about 532 nm.

23. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

patterning the semiconductor film to form an island-like semiconductor film;

irradiating the island-like semiconductor film with a continuous wave laser beam to crystallize the island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a second harmonic of a solid laser.

24. A method of manufacturing a semiconductor device according to claim 23, wherein the semiconductor film is an amorphous semiconductor film.

25. A method of manufacturing a semiconductor device according to claim 23, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

26. A method of manufacturing a semiconductor device according to claim 23, wherein the second harmonic has a wavelength of about 532 nm.

27. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein the continuous wave laser beam is a second harmonic of a laser comprising Nd.

28. A method of manufacturing a semiconductor device according to claim 27, wherein the semiconductor film is an amorphous semiconductor film.

29. A method of manufacturing a semiconductor device according to claim 27, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

30. A method of manufacturing a semiconductor device according to claim 27, wherein the second harmonic has a wavelength of about 532 nm.

31 A method of manufacturing a semiconductor device according to claim 27, wherein the aspect ratio is 100 to 10000.

32. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the semiconductor film; and

irradiating the source region and the drain region with a linear laser beam of excimer laser,

wherein the continuous wave laser beam is a second harmonic of a laser comprising Nd.

33. A method of manufacturing a semiconductor device according to claim 32, wherein the semiconductor film is an amorphous semiconductor film.

34. A method of manufacturing a semiconductor device according to claim 32, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

35. A method of manufacturing a semiconductor device according to claim 32, wherein the second harmonic has a wavelength of about 532 nm.

36. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

patterning the crystallized semiconductor film to form a crystallized island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a second harmonic of a laser comprising Nd.

37. A method of manufacturing a semiconductor device according to claim 36, wherein the semiconductor film is an amorphous semiconductor film.

38. A method of manufacturing a semiconductor device according to claim 36, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

39. A method of manufacturing a semiconductor device according to claim 36, wherein the second harmonic has a wavelength of about 532 nm.

40. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

patterning the semiconductor film to form an island-like semiconductor film;

irradiating the island-like semiconductor film with a continuous wave laser beam to crystallize the island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a second harmonic of a laser comprising Nd.

41. A method of manufacturing a semiconductor device according to claim 40, wherein the semiconductor film is an amorphous semiconductor film.

42. A method of manufacturing a semiconductor device according to claim 40, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

43. A method of manufacturing a semiconductor device according to claim 40, wherein the second harmonic has a wavelength of about 532 nm.

44. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein an irradiation area of the continuous wave laser beam at the semiconductor film has an oval shape having an aspect ratio of 10 or more, and

wherein the continuous wave laser beam is a third harmonic of a solid laser.

45. A method of manufacturing a semiconductor device according to claim 44, wherein the semiconductor film is an amorphous semiconductor film.

46. A method of manufacturing a semiconductor device according to claim 44, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

47. A method of manufacturing a semiconductor device according to claim 44, wherein the aspect ratio is 100 to 10000.

48. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein the continuous wave laser beam is a third harmonic of a solid laser.

49. A method of manufacturing a semiconductor device according to claim 48, wherein the semiconductor film is an amorphous semiconductor film.

50. A method of manufacturing a semiconductor device according to claim 48, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

51. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a plastic substrate;

forming a semiconductor film on the insulating film; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein an irradiation area of the continuous wave laser beam at the semiconductor film has an oval shape having an aspect ratio of 10 or more, and

wherein the continuous wave laser beam is a third harmonic of a solid laser

52. A method of manufacturing a semiconductor device according to claim 51, wherein the semiconductor film is an amorphous semiconductor film.

53. A method of manufacturing a semiconductor device according to claim 51, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

54. A method of manufacturing a semiconductor device according to claim 51, wherein the aspect ratio is 100 to 10000.

55. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the semiconductor film; and

irradiating the source region and the drain region with a linear laser beam of excimer laser,

wherein the continuous wave laser beam is a third harmonic of a solid laser.

56. A method of manufacturing a semiconductor device according to claim 55, wherein the semiconductor film is an amorphous semiconductor film.

57. A method of manufacturing a semiconductor device according to claim 55, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

58. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

patterning the crystallized semiconductor film to form a crystallized island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a third harmonic of a solid laser.

59. A method of manufacturing a semiconductor device according to claim 58, wherein the semiconductor film is an amorphous semiconductor film.

60. A method of manufacturing a semiconductor device according to claim 58, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

61. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

patterning the semiconductor film to form an island-like semiconductor film;

irradiating the island-like semiconductor film with a continuous wave laser beam to crystallize the island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a third harmonic of a solid laser.

62. A method of manufacturing a semiconductor device according to claim 61, wherein the semiconductor film is an amorphous semiconductor film.

63. A method of manufacturing a semiconductor device according to claim 61, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

64. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein the continuous wave laser beam is a third harmonic of a laser comprising Nd.

65. A method of manufacturing a semiconductor device according to claim 64, wherein the semiconductor film is an amorphous semiconductor film.

66. A method of manufacturing a semiconductor device according to claim 64, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

67. A method of manufacturing a semiconductor device according to claim 64, wherein the aspect ratio is 100 to 10000.

68. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the semiconductor film; and

irradiating the source region and the drain region with a linear laser beam of excimer laser,

wherein the continuous wave laser beam is a third harmonic of a laser comprising Nd.

69. A method of manufacturing a semiconductor device according to claim 68, wherein the semiconductor film is an amorphous semiconductor film.

70. A method of manufacturing a semiconductor device according to claim 68, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

71. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

patterning the crystallized semiconductor film to form a crystallized island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a third harmonic of a laser comprising Nd.

72. A method of manufacturing a semiconductor device according to claim 71, wherein the semiconductor film is an amorphous semiconductor film.

73. A method of manufacturing a semiconductor device according to claim 71, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

74. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

patterning the semiconductor film to form an island-like semiconductor film;

irradiating the island-like semiconductor film with a continuous wave laser beam to crystallize the island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a third harmonic of a laser comprising Nd.

75. A method of manufacturing a semiconductor device according to claim 74, wherein the semiconductor film is an amorphous semiconductor film.

76. A method of manufacturing a semiconductor device according to claim 74, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

77. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein an irradiation area of the continuous wave laser beam at the semiconductor film has an oval shape having an aspect ratio of 10 or more, and

wherein the continuous wave laser beam is a fourth harmonic of a solid laser.

78. A method of manufacturing a semiconductor device according to claim 77, wherein the semiconductor film is an amorphous semiconductor film.

79. A method of manufacturing a semiconductor device according to claim 77, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

80. A method of manufacturing a semiconductor device according to claim 77, wherein the aspect ratio is 100 to 10000.

81. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein the continuous wave laser beam is a fourth harmonic of a solid laser.

82. A method of manufacturing a semiconductor device according to claim 81, wherein the semiconductor film is an amorphous semiconductor film.

83. A method of manufacturing a semiconductor device according to claim 81, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

84. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a plastic substrate;

forming a semiconductor film on the insulating film; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein an irradiation area of the continuous wave laser beam at the semiconductor film has an oval shape having an aspect ratio of 10 or more, and

wherein the continuous wave laser beam is a fourth harmonic of a solid laser.

85. A method of manufacturing a semiconductor device according to claim 84, wherein the semiconductor film is an amorphous semiconductor film.

86. A method of manufacturing a semiconductor device according to claim 84, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

87. A method of manufacturing a semiconductor device according to claim 84, wherein the aspect ratio is 100 to 10000.

88. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the semiconductor film; and

irradiating the source region and the drain region with a linear laser beam of excimer laser,

wherein the continuous wave laser beam is a fourth harmonic of a solid laser.

89. A method of manufacturing a semiconductor device according to claim 88, wherein the semiconductor film is an amorphous semiconductor film.

90. A method of manufacturing a semiconductor device according to claim 88, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

91. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

patterning the crystallized semiconductor film to form a crystallized island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a fourth harmonic of a solid laser.

92. A method of manufacturing a semiconductor device according to claim 91, wherein the semiconductor film is an amorphous semiconductor film.

93. A method of manufacturing a semiconductor device according to claim 91, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

94. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

patterning the semiconductor film to form an island-like semiconductor film;

irradiating the island-like semiconductor film with a continuous wave laser beam to crystallize the island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a fourth harmonic of a solid laser.

95. A method of manufacturing a semiconductor device according to claim 94, wherein the semiconductor film is an amorphous semiconductor film.

96. A method of manufacturing a semiconductor device according to claim 94, wherein the solid laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

97. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air; and

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film,

wherein the continuous wave laser beam is a fourth harmonic of a laser comprising Nd.

98. A method of manufacturing a semiconductor device according to claim 97, wherein the semiconductor film is an amorphous semiconductor film.

99. A method of manufacturing a semiconductor device according to claim 97, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

100. A method of manufacturing a semiconductor device according to claim 97, wherein the aspect ratio is 100 to 10000.

101. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the semiconductor film; and

irradiating the source region and the drain region with a linear laser beam of excimer laser,

wherein the continuous wave laser beam is a fourth harmonic of a laser comprising Nd.

102. A method of manufacturing a semiconductor device according to claim 101, wherein the semiconductor film is an amorphous semiconductor film.

103. A method of manufacturing a semiconductor device according to claim 101, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

104. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

irradiating the semiconductor film with a continuous wave laser beam to crystallize the semiconductor film;

patterning the crystallized semiconductor film to form a crystallized island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a fourth harmonic of a laser comprising Nd.

105. A method of manufacturing a semiconductor device according to claim 104, wherein the semiconductor film is an amorphous semiconductor film.

106. A method of manufacturing a semiconductor device according to claim 104, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.

107. A method of manufacturing a semiconductor device comprising the steps of:

forming an insulating film over a substrate;

forming a semiconductor film on the insulating film successively without exposing the insulating film to the air;

patterning the semiconductor film to form an island-like semiconductor film;

irradiating the island-like semiconductor film with a continuous wave laser beam to crystallize the island-like semiconductor film;

forming a source region, a drain region, an LDD region, and a channel region in the crystallized island-like semiconductor film; and

wherein the LDD region comprises a first portion which is overlapped with a gate electrode and a second portion which is not overlapped with the gate electrode, and

wherein the continuous wave laser beam is a fourth harmonic of a laser comprising Nd.

108. A method of manufacturing a semiconductor device according to claim 107, wherein the semiconductor film is an amorphous semiconductor film.

109. A method of manufacturing a semiconductor device according to claim 107, wherein the laser is selected from the group consisting of YAG laser, YVO_4 laser, and $YAlO_3$ laser.